Abstract

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Isoflavonoids are subgroup of flavonoids, belonging to the phytoestrogenic compounds. These compounds occur especially in leguminous, mainly in soya (*Glycine max* (L.) Merr). They have a positive impact on human health, especially for its estrogenic effects, due to which are applied in the fight against osteoporosis, cardiovascular diseases, atherosclerosis and for moderation of menopausal symptoms. Furthermore they exhibit antibacterial activity and protect cells against damage of DNA. This thesis deals with their metabolism and action in human and animal organism, also with the influence of intestinal microflora to transform these isoflavonoids into metabolites, as well as the effects of these metabolites. There are also mentioned these isoflavonoids: daidzein, genistein, biochanin A, formononetin, calycosin, prunetin, puerarin, cladrin, tectorigenin and kakkalid.

Key words: isoflavonoids, metabolism, human organism